## In the claims:

- 1-35. (cancelled)
- 36. (New) A peptide comprising an amino acid sequence selected from the group consisting of SEQ ID NOs:6 and 10.
- 37. (New) A peptide selected from the group consisting of SEQ ID NOs:6 and 10.
- 38. (New) A cyclic peptide comprising an amino acid sequence selected from the group consisting of SEQ ID NOs:2, 6, 10 and 12, the peptide being no more than 50 amino acid residues in length.
- 39. (New) The peptide of claim 36, wherein the peptide being no more than 50 amino acid residues in length.
- 40. (New) The peptide of claim 37, wherein the peptide being no more than 50 amino acid residues in length.
- 41. (New) A cyclic peptide comprising an amino acid sequence as set forth in SEQ ID NO:27 or 32, wherein the peptide being at least 6 and no more than 50 amino acid residues in length.
- 42. (New) A peptide comprising an amino acid sequence as set forth in SEQ ID NO:27 or 32, wherein the peptide being at least 6 and no more than 50 amino acid residues in length.
- 43. (New) The cyclic peptide of claim 41, wherein the amino acid sequence is set forth by SEQ ID NO:2, 6 or 12.
- 44. (New) A composition-of-matter comprising at least two peptides, each independently selected from the group consisting of SEQ ID NOs:2, 4, 6, 8, 10 and 12.

- 45. (New) A pharmaceutical composition comprising as an active ingredient the peptide of claim 42 and a pharmaceutically acceptable carrier or diluent.
- 46. (New) A pharmaceutical composition comprising as an active ingredient a peptide having an amino acid sequence selected from the group consisting of SEQ ID NOs:2, 6, 10 and 12, said peptide being no more than 50 amino acid residues in length and a pharmaceutically acceptable carrier or diluent.
- 47. (New) A method of promoting angiogenesis in a tissue of a subject, the method comprising providing to the subject, a therapeutically effective amount of the peptide of claim 42, to thereby promote angiogenesis in the subject.
- 48. (New) A method of promoting angiogenesis in a tissue of a subject, the method comprising providing to the subject, a therapeutically effective amount of a peptide having an amino acid sequence selected from the group consisting of SEQ ID NOs:2, 6, 10 and 12, said peptide being no more than 50 amino acid residues in length, to thereby promote angiogenesis in the subject.
- 49. (New) A nucleic acid construct comprising a polynucleotide sequence encoding the peptide of claim 36, wherein the peptide is as set forth by SEQ ID NO:6 or 10.
- 50. (New) A nucleic acid construct comprising a polynucleotide sequence encoding the peptide of claim 37, wherein the peptide is as set forth by SEQ ID NO:6 or 10.
- 51. (New) A nucleic acid construct comprising a polynucleotide sequence encoding the peptide of claim 41.
- 52. (New) A nucleic acid construct comprising a polynucleotide sequence encoding the peptide of claim 43.

- 53. (New) A composition for targeting a drug to endothelial cells, the composition comprising the drug fused to the peptide of claim 37.
- 54. (New) A composition for targeting a drug to endothelial cells, the composition comprising the drug fused to the peptide of claim 39.
- 55. (New) A method of identifying putative angiogenic molecules, the method comprising:
- (a) providing endothelial cells having peptides bound thereto, each of said peptides having an amino acid sequence selected from the group consisting of SEQ ID NOs:1, 6, 10 and 12, said peptide being no more than 50 amino acid residues in length; and
- (b) identifying a molecule capable of displacing said peptides from said endothelial cells, to thereby identify putative angiogenic molecules.
  - 56. (New) The peptide of claim 37, wherein the peptide is a linear peptide.
  - 57. (New) The peptide of claim 42, wherein the peptide is a linear peptide.
- 58. (New) The pharmaceutical composition of claim 46, wherein the peptide is a linear peptide.
  - 59. (New) The method of claim 48, wherein the peptide is a linear peptide.
  - 60. (New) The peptide of claim 37, wherein the peptide is a cyclic peptide.
  - 61. (New) The peptide of claim 42, wherein the peptide is a cyclic peptide.
- 62. (New) The pharmaceutical composition of claim 46, wherein the peptide is a cyclic peptide.
  - 63. (New) The method of claim 48, wherein the peptide is a cyclic peptide.

- 64. (New) The pharmaceutical composition of claim 45, wherein said peptide is a cyclic peptide and whereas said amino acid sequence is selected from the group consisting of SEQ ID NOs:2, 6 and 12.
- 65. (New) The method of claim 47, wherein said peptide is a cyclic peptide and whereas said amino acid sequence is selected from the group consisting of SEQ ID NOs:2, 6 and 12.
- 66. (New) The cyclic peptide of claim 41, wherein the peptide is set forth by SEQ ID NOs:2, 6 and/or 12.
- 67. (New) The peptide of claim 42, wherein the amino acid sequence is set forth by SEQ ID NO:6.
- 68. (New) The method of claim 47, wherein the subject suffers from arteriosclerosis, retinopathy, remodeling disorder, von Hippel-Lindau syndrome, cerebral ischemia, diabetes and/or hereditary hemorrhagic telengiectasia.
- 69. (New) The method of claim 48, wherein the subject suffers from arteriosclerosis, retinopathy, remodeling disorder, von Hippel-Lindau syndrome, cerebral ischemia, diabetes and/or hereditary hemorrhagic telengiectasia.